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SEQ ID NO:1

at least 25 contiguous bases of SEQ ID NO:1

SEQ ID NO:2

thanks
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Searcher:_____
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TYPE OF SEARCH:
NA Sequences:_____
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Patent Family:_____
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VENDOR/COST (where applic.)
STN:_____
DIALOG:_____
Questel/Orbit:_____
DRLink:_____
Lexis/Nexis:_____
Sequence Sys.:_____
WWW/Internet:_____
Other (specify):_____

Sequence Comparison A

SEQ ID NO:1

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LOCUS       RATMORA                 1586 bp    mRNA    linear   ROD 04-AUG-1993
DEFINITION  Rattus norvegicus mu opioid receptor mRNA, complete cds.
ACCESSION   L13069
VERSION     L13069.1  GI:348250
KEYWORDS    mu opioid receptor.
SOURCE      Rattus norvegicus (Norway rat)
  ORGANISM  Rattus norvegicus
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1  (bases 1 to 1586)
  AUTHORS   Chen,Y., Mestek,A., Liu,J., Hurley,J.A. and Yu,L.
  TITLE     Molecular cloning and functional expression of a mu-opioid receptor
            from rat brain
  JOURNAL   Mol. Pharmacol. 44 (1), 8-12 (1993)
  MEDLINE   93341493
   PUBMED   8393525
COMMENT     Original source text: Rattus norvegicus Whole brain cDNA to mRNA.
FEATURES             Location/Qualifiers
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                     /mol_type="mRNA"
                     /db_xref="taxon:10116"
                     /tissue_type="Whole brain"
     CDS             210. .1406
                     /codon_start=1
                     /evidence=experimental
                     /label=RATMOR1
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                     /db_xref="GI:348251"
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                     MSVDRYIAVCHPVKALDFRTPRNAKIVNVCNWILSSAIGLPVMFMATTKYRQGSIDCT
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                     RITRMVLVVVAVFIVCWTPIHIYVIIKALITIPETTFQTVSWHFCIALGYTNSCLNPV
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                     ETAPLP"
BASE COUNT      376 a    479 c    361 g    370 t
ORIGIN
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Query Match 98.0%; Score 1586; DB 10; Length 1586;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1586; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy         65 TCTTCTCTGGTTCCACTAGGGCTGGTCCATGTAAGAATCTGACGGAGCCTAGGGCAGCTG 124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 TCTTCTCTGGTTCCACTAGGGCTGGTCCATGTAAGAATCTGACGGAGCCTAGGGCAGCTG 120

Qy        125 TGAGAGGAAGAGGCTGGGGCGCGTGGAACCCGAAAAGTCTGAGTGCTCTCAGTTACAGCC 184
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Qy        185 TACCTAGTCCGCAGCAGGCCTTCAGCACCATGGACAGCAGCACCGGCCCAGGGAACACCA 244
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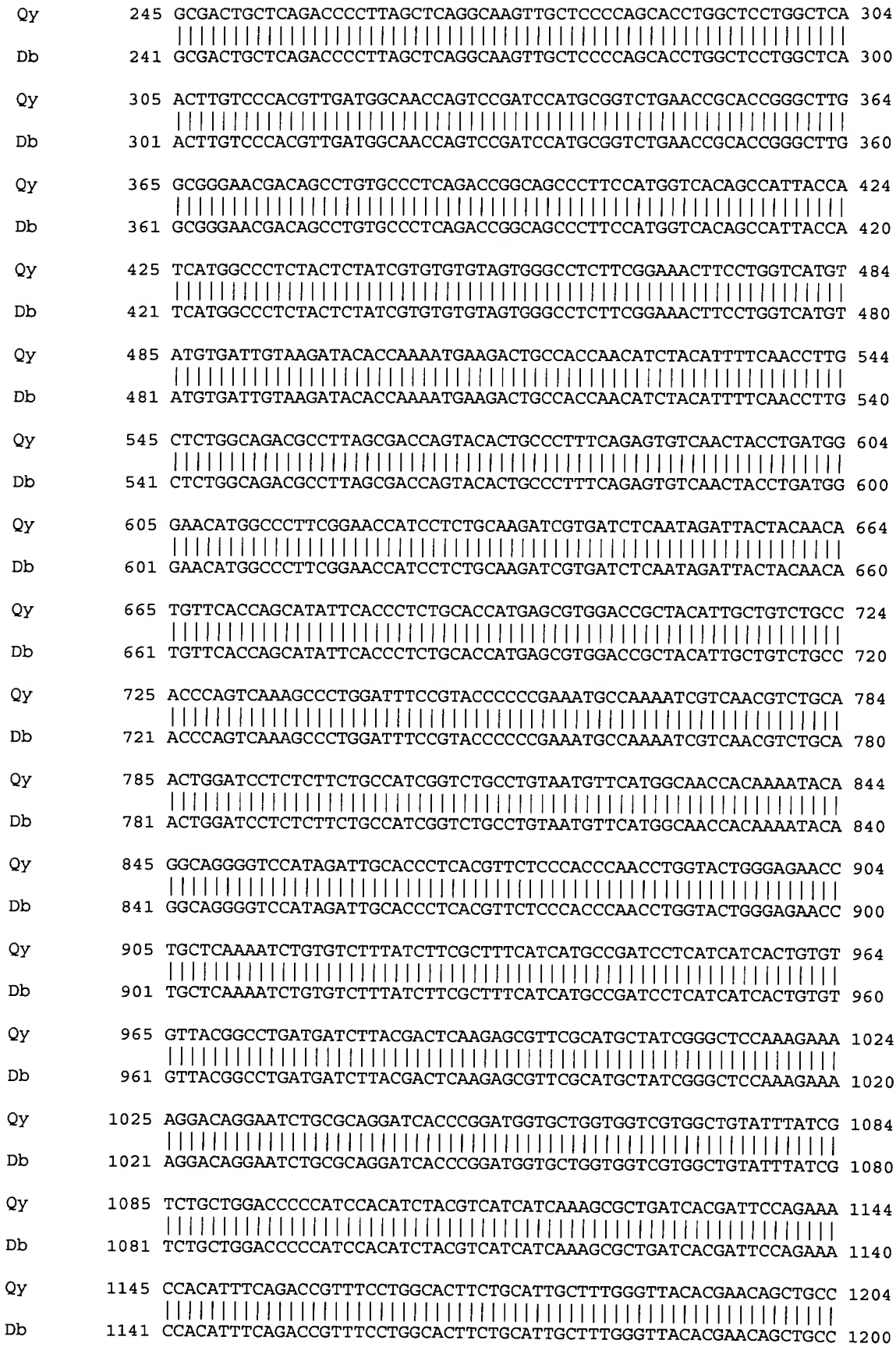
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Db 361 GCGGGAACGACAGCCTGTGCCCTCAGACCGGCAGCCCTTCCATGGTCACAGCCATTACCA 420
Qy 425 TCATGGCCCTCTACTCTATCGTGTGTGTAGTGGGCCTCTTCGGAAACTTCCTGGTCATGT 484
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Qy 485 ATGTGATTGTAAGATACACCAAAATGAAGACTGCCACCAACATCTACATTTTCAACCTTG 544
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Qy 545 CTCTGGCAGACGCCTTAGCGACCAGTACACTGCCCTTTCAGAGTGTCAACTACCTGATGG 604
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Qy 605 GAACATGGCCCTTCGGAACCATCCTCTGCAAGATCGTGATCTCAATAGATTACTACAACA 664
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Qy 665 TGTTCACCAGCATATTCACCCTCTGCACCATGAGCGTGGACCGCTACATTGCTGTCTGCC 724
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Qy 725 ACCCAGTCAAAGCCCTGGATTTCCGTACCCCCCGAAATGCCAAAATCGTCAACGTCTGCA 784
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Qy 785 ACTGGATCCTCTCTTCTGCCATCGGTCTGCCTGTAATGTTCATGGCAACCACAAAATACA 844
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Qy 845 GGCAGGGGTCCATAGATTGCACCCTCACGTTCTCCCACCCAACCTGGTACTGGGAGAACC 904
Db 841 GGCAGGGGTCCATAGATTGCACCCTCACGTTCTCCCACCCAACCTGGTACTGGGAGAACC 900
Qy 905 TGCTCAAAATCTGTGTCTTTATCTTCGCTTTCATCATGCCGATCCTCATCATCACTGTGT 964
Db 901 TGCTCAAAATCTGTGTCTTTATCTTCGCTTTCATCATGCCGATCCTCATCATCACTGTGT 960
Qy 965 GTTACGGCCTGATGATCTTACGACTCAAGAGCGTTCGCATGCTATCGGGCTCCAAAGAAA 1024
Db 961 GTTACGGCCTGATGATCTTACGACTCAAGAGCGTTCGCATGCTATCGGGCTCCAAAGAAA 1020
Qy 1025 AGGACAGGAATCTGCGCAGGATCACCCGGATGGTGCTGGTGGTCGTGGCTGTATTTATCG 1084
Db 1021 AGGACAGGAATCTGCGCAGGATCACCCGGATGGTGCTGGTGGTCGTGGCTGTATTTATCG 1080
Qy 1085 TCTGCTGGACCCCCATCCACATCTACGTCATCATCAAAGCGCTGATCACGATTCCAGAAA 1144
Db 1081 TCTGCTGGACCCCCATCCACATCTACGTCATCATCAAAGCGCTGATCACGATTCCAGAAA 1140
Qy 1145 CCACATTTCAGACCGTTTCCTGGCACTTCTGCATTGCTTTGGGTTACACGAACAGCTGCC 1204
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Qy       1265 GCATCCCAACCTCGTCCACGATCGAACAGCAAAACTCCACTCGAGTCCGTCAGAACACTA 1324
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1261 GCATCCCAACCTCGTCCACGATCGAACAGCAAAACTCCACTCGAGTCCGTCAGAACACTA 1320

Qy       1325 GGGAACATCCCTCCACGGCTAATACAGTGGATCGAACTAACCACCAGCTAGAAAATCTGG 1384
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1321 GGGAACATCCCTCCACGGCTAATACAGTGGATCGAACTAACCACCAGCTAGAAAATCTGG 1380

Qy       1385 AGGCAGAAACTGCTCCATTGCCCTAACTGGGTCTCACACCATCCAGACCCTCGCTAAGCT 1444
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1381 AGGCAGAAACTGCTCCATTGCCCTAACTGGGTCTCACACCATCCAGACCCTCGCTAAGCT 1440

Qy       1445 TAGAGGCCGCCATCTACGTGGAATCAGGTTGCTGTCAGGGTGTGTGGGAGGCTCTGGTTT 1504
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Qy       1505 CCTGAGAAACCATCTGATCCTGCATTCAAAGTCATTCCTCTCTGGCTACTTCACTCTGCA 1564
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Qy       1565 CATGAGAGATGCTCAGACTGATCAAG 1590
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Db       1561 CATGAGAGATGCTCAGACTGATCAAG 1586
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B

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ID   AAD11041 standard; cDNA; 1981 BP.
XX
AC   AAD11041;
XX
DT   24-SEP-2001  (first entry)
XX
DE   Murine delta opioid receptor (DOR-2) partial cDNA.
XX
KW   Mouse; delta opioid receptor; DOR-2; analgesic; enkephalin;
KW   opioid addiction; anti-addictive; ss.
XX
OS   Mus sp.
XX
PN   US6265563-B1.
XX
PD   24-JUL-2001.
XX
PF   13-FEB-1995;   95US-0387707.
XX
PR   13-AUG-1992;   92US-0929200.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Evans CJ,  Keith DE,  Edwards RH,  Kaufman D;
XX
DR   WPI; 2001-463944/50.
XX
PT   Nucleic acids encoding mammalian kappa and mu opioid receptors, useful
PT   e.g. to identify substances for treating opioid addiction and/or useful
PT   as analgesics -
XX
PS   Claim 7; Fig 9; 46pp; English.
XX
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CC The invention relates to recombinant nucleic acid molecules which encode
CC the murine delta opioid receptor, as well as recombinant nucleic acid
CC molecules which can be retrieved using low-stringency hybridisation to
CC this disclosed DNA. The invention provides genes encoding delta, kappa,
CC and mu receptors of any species containing genes encoding such receptors
CC sufficiently homologous to hybridise under low-stringency conditions.
CC The nucleic acids may be used to recombinantly express kappa and
CC mu opioid receptors in host cells. These cells may then be used in
CC assays to identify modulators of the receptors activity that may be
CC used, for example as analgesics or to combat the effects of opioid
CC addiction. The nucleic acids and their complements may also be used as
CC probe sequences to identify and characterise opioid receptor nucleic
CC acids. The present sequence is murine delta opioid receptor (DOR-2)
CC partial cDNA, mMOR-1.
XX
SQ Sequence 1981 BP; 499 A; 550 C; 436 G; 495 T; 1 other;

Query Match 85.7%; Score 1386.4; DB 22; Length 1981;
Best Local Similarity 92.2%; Pred. No. 0;
Matches 1494; Conservative 0; Mismatches 122; Indels 5; Gaps 3;

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Db         43 GTGGGAGGGGGATACAAGCAGAGGAGAATATCGGACGCTCAGACGTTCCATTCTGCCTGC 102

Qy         62 CGCTCTTCTCTGGTTCCACTAGGGCTGGTCCATGTAAGAATCTGACGGAGCCTAGGGCAG 121
              |||||||||||||||||||||||||| |||| |||||||| ||||||||||||||||||||
Db        103 CGCTCTTCTCTGGTTCCACTAGGGCTTGTCCTTGTAAGAAACTGACGGAGCCTAGGGCAG 162

Qy        122 CTGTGAGAGGAAGAGGCTGGGGCGCGTGGAACCCGAAAAGTC-TGAGTGCTCTCAGTTAC 180
              |||||||||||||||||||||||||| |||||||||| | || ||||||||||||||||
Db        163 CTGTGAGAGGAAGAGGCTGGGGCGCCTGGAACCCGAACACTCTTGAGTGCTCTCAGTTAC 222

Qy        181 AGCCTACCTAGTCCGCAGCAGGCCTTCAGCACCATGGACAGCAGCACCGGCCCAGGGAAC 240
              || ||||| |||||||| | || ||||| |||||||||||||| ||||||||||||||
Db        223 AGNCTACCGAGTCCGCAGGAAGCATTCAGAACCATGGACAGCAGCGCCGGCCCAGGGAAC 282

Qy        241 ACCAGCGACTGCTCAGACCCCTTAGCTCAGGCAAGTTGCTCCCCAGCACCTGGCTCCTGG 300
              | |||||||||||| |||||||||||||  ||||||||||||||||||||||||||||||
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Qy        301 CTCAACTTGTCCCACGTTGATGGCAACCAGTCCGATCCATGCGGTCTGAACCGCACCGGG 360
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Qy        361 CTTGGCGGGAACGACAGCCTGTGCCCTCAGACCGGCAGCCCTTCCATGGTCACAGCCATT 420
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Qy        421 ACCATCATGGCCCTCTACTCTATCGTGTGTGTAGTGGGCCTCTTCGGAAACTTCCTGGTC 480
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Qy        481 ATGTATGTGATTGTAAGATACACCAAAATGAAGACTGCCACCAACATCTACATTTTCAAC 540
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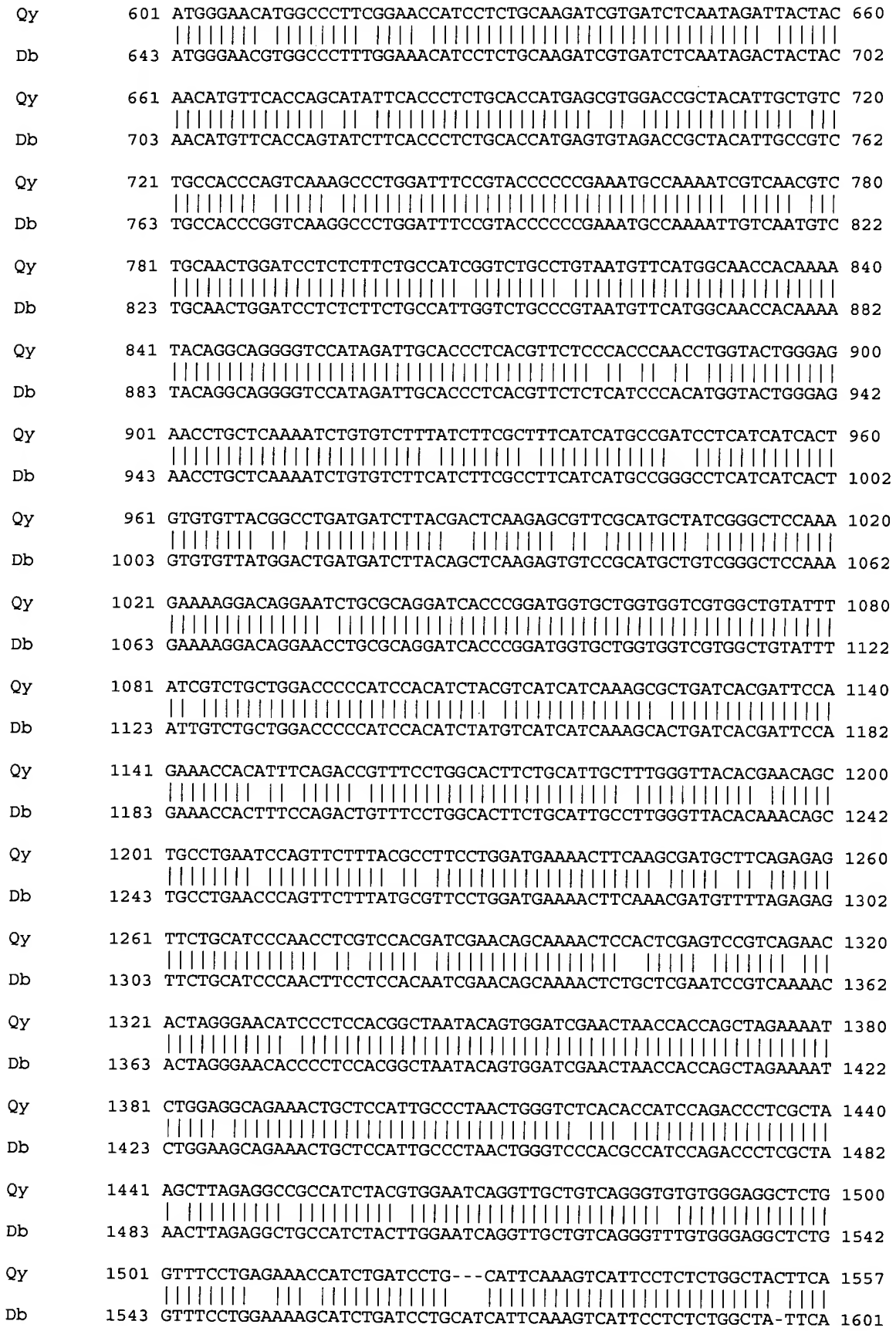

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Qy       1618 A 1618
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Db       1662 A 1662
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SEQ ID NO:2

C

R;Chen, Y.; Mestek, A.; Liu, J.; Hurley, J.A.; Yu, L.
Mol. Pharmacol. 44, 8-12, 1993
A;Title: Molecular cloning and functional expression of a mu-opioid receptor from rat brain.
A;Reference number: I57951; MUID:93341493; PMID:8393525
A;Accession: I57951
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-398 <RE2>

Query Match 100.0%; Score 2111; DB 2; Length 398;
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Matches 398; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy        181 PRNAKIVNVCNWILSSAIGLPVMFMATTKYRQGSIDCTLTFSHPTWYWENLLKICVFIFA 240
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Db        361 QNSTRVRQNTREHPSTANTVDRTNHQLENLEAETAPLP 398
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